Date Sub	Date bmitted Atlantic chfield	Date EPA Submitted Requested Due Date	Atlantic Richfield Estimated Timeframe for Submittal	Work Plan / Document	Amendment / Addendum / Revision No.	Author	Recipient	ltem	Atlantic Richfield US EPA Status	US EPA Comment Atlantic Richfield Comment
Iministrative Order	er							Administrative Order for RI/FS, Leviathan Mine, Alpine		
06/23/08				UAO	NA	US EPA	Atlantic Richfield	County, California: US EPA Region IX, CERCLA Docket No. 2008-18	Received	
ta Quality Objectiv 08/14/15 08/	ives 3/14/14	08/10/15		On-Property / Off- Property / Reference	NA	Atlantic Richfield	US EPA	Response to US EPA and LRWQCB Comments on the Revised Data Quality Objectives for the On-Property and Reference Study Areas and Updated Cross-Reference Matrix Table	d Submitted	
07/10/15				On-Property / Off- Property / Reference	NA	US EPA	Atlantic Richfield	EPA Comments on Revised Data Quality Objectives for the On-Property and Reference Study Areas and Updated Cross-Reference Matrix Table	Received	Also requested response to US EPA's 12/26/12 and 11/14/14 letters.
02/28/15				On-Property / Off- Property / Reference	NA	Atlantic Richfield	US EPA	Revised Data Quality Objectives for the On-Property and Reference Area Study Areas and Updated Cross- Reference Matrix Table	d Submitted	Response to US EPA 11/14/2014 comments
02/28/15				Reference	NA	Atlantic Richfield	US EPA	Revised Reference Area DQOs	Submitted	Submitted with Draft Final Reference Area FRI Work Plan
11/14/14				On-Property / Off- Property / Reference	NA	US EPA	Atlantic Richfield	Comments on Technical Memorandum: Current Data Quality Objectives and Leviathan Mine FRI Work Plan Cross Reference Matrix	Received	
09/05/14				On-Property / Off- Property / Reference	NA	Atlantic Richfield	US EPA	Technical Memorandum: Compilation of Data Quality Objectives and Cross Reference Matrix	Submitted	
06/28/13				Off-Property	NA	Atlantic Richfield	US EPA	Revised Off-Property DQOs	Submitted	Submitted with Revised Off-Property FRI Work Plan Addendum No. 2
12/26/12				Off-Property	NA	US EPA	Atlantic Richfield	Review and Comments on Draft DQOs Submittal dated November 19, 2012; Direction to Prepare and Submit Revised Off-Property FRI Work Plan	Received	
11/19/12				Off-Property / Reference	NA	Atlantic Richfield	US EPA	Revised DQO Summary Tables for On-Property and Reference Study Areas	Submitted	
09/05/12			ir.		NA	Atlantic Richfield	US EPA	Technical Workshop - DQOs	Conducted	September 5 and 6, 2012
05/13/10				DQO Report	NA	US EPA	Atlantic Richfield	Programmatic DQOs (transmitted with 5/13/10 approval of PWP)	Received	
04/23/09				DQO Report	NA	US EPA		Approval with Comments for Leviathan Mine DQOs Report Submitted October 2008, and Direction to Prepare RI/FS Work Plan Pursuant to Administrative Order for RI/FS	Received	
10/21/08				DQO Report	NA	Atlantic Richfield	US EPA	Draft Data Quality Objectives Report: RI/FS	Submitted	
ogram Work Plan		11/21/16		Program	QAPP	ÜS EPA	Atlantic Richfield	EPA Comments on Atlantic Richfield Company (ARC) Final Revised RI/FS Quality Assurance Project Plan (QAPP), Revision 1 for the Leviathan Mine Site in Alpine County, California; dated June 17, 2016, Updated Project Database dated June 30, 2016; and the DQOs response from ARC dated August 14, 2015	Received; RTC and revised document in progress	EPA conditionally approved the QAPP dated June 17, 2016; provided EPA comments are addressed. A few of the comments remain unaddressed as outlined above. EPA's conditional approval remains in place. Within 6t days, or by January 21, 2017. EPA directs ARC to provide a line-by-line response to these comments and submit a revised Final Updated Quality Assurance Project Plan (QAPP) and Da Management Plan that incorporates the Database, the DQOs and the Conceptual Site Model incorporating these changes.
11/01/16 11/	1/01/16			Program	QAPP	Atlantic Richfield	US EPA	Response to EPA comments on PE Samples	Submitted	Email; discussed with US. EPA via telephone o 11/8/16
10/24/16	1	10/24/16		Program	QAPP	US EPA	Atlantic Richfield	EPA comments on PE Samples	Received	Email
06/17/16 06/	3/17/16	05/27/16		Program	QAPP	Atlantic Richfield	US EPA	Remedial Investigation/Feasibility Study Quality Assurance Project Plan, Revision No. 1 [Final]	Submitted US EPA comments delivered 11/21/16	Includes line-by-line response to 04/28/16 comments. Includes complete set of DQOs as on submittal date.

04/28/16		04/28/16	Program	QAPP	US EPA	Atlantic Richfield	EPA Comments on Atlantic Richfield RI/FS Quality Assurance Project Plan (QAPP), Revision No. 1 for the Leviathan Mine Site in Alpine County, California; dated March 9, 2016	Received	Conditional approval of RI/FS Quality Assurar Project Plan, Revision No. 1. Within 30 days, requests line by line RTC and revised Final Updated Quality Assurance Project Plan and Data Management Plan along with updated schedule that incorporates the data usability process US EPA has outlined.
03/09/16	03/09/16	03/09/16	Program	QAPP	Atlantic Richfield	US EPA	RI/FS Quality Assurance Project Plan, Revision No. 1	Submitted	Includes line-by-line response to 02/09/16 comments.
02/09/16		02/09/16	Program	QAPP	US EPA	Atlantic Richfield	EPA Comments on Atlantic Richfield RI/FS Quality Assurance Project Plan (QAPP), Revision 1 for the Leviathan Mine Site in Alpine County, California	Received	
02/05/16	02/05/16		Program	QAPP	Atlantic Richfield	US EPA	Draft Annotated Revised QAPP TOC and Crosswalk	Submitted	Email; attached files are dated 01/27/16.
01/14/16		01/14/16	Program	QAPP	US EPA	Atlantic Richfield	EPA initial comments on the QAPP and Data Quality Discussions	Received	Email
12/14/15	12/14/15		Program	QAPP	Atlantic Richfield	US EPA	Quality Assurance Project Plan, Revision 1	Submitted US EPA preliminary comments delivered 01/14/15	Requested by US EPA in 04/01/15 technical meeting to discuss data usability.
05/13/10			Program	PWP	US EPA	Atlantic Richfield	Approval with Comments and Direction to Implement 2009 Draft Program Work Plan and Addendum for RI/FS	Received	
02/26/10			Program	PWP	US EPA	Atlantic Richfield	Schedule for US EPA Comments on 2009 Draft Program Work Plan and Addendum for RIFS	Received	
11/16/09			Program	Addendum 1	Atlantic Richfield	US EPA	Addendum No. 1 to 2009 Draft Program Work Plan for RI/FS	Submitted	
07/10/09			Program	PWP	Atlantic Richfield	US EPA	Draft RI/FS Program Work Plan	Submitted	
8/24/2016		8/24/2016	On-Property, Off- Property, and Reference	Fish TSAP	Atlantic Richfield	US EPA	Email FW: NED OK WITH THIS?EPA Conditional Approval on the Fish Sampling TSAP	Submitted	Concurs with ARC's proposed sampling (8/2 email), but notes that timing of sampling inte to ensure comparable results with previous on October because fish feeding behaviours
8/23/2016	8/23/2016		On-Property, Off- Property, and Reference	Fish TSAP	Atlantic Richfield	US EPA	Email RE: EPA Conditional Approval on the Fish Sampling TSAP	Submitted	change with season. Responds to US EPA comments on sampling schedule. Response to reporting schedule submitted in a separate letter on 9/9/16.
08/12/16		08/12/16	On-Property, Off- Property, and Reference	Fish TSAP	US EPA	Atlantic Richfield	EPA Comments ARC Response to Comments (RTC) of Draft On-Property, Off-Property Area, and Reference Area FRI Work Plans - Task Sampling and Analysis Plan for Fish Investigation (Draft Final), Leviathan Mine Site, Alpine County, California, Leviathan Mine Site, Alpine County, California, Dated June 13, 2016 [sic]	Received	Conditional approval provided comments are addressed and incorporated as described. Indicates work outlined in TSAP should be completed during the 2016 field season. Requests that sampling be conducted in late September. Requests timely notification of anticipated completion of work. Requests wireport within 90 days of completion of field w
06/13/16	06/13/16	06/13/16	On-Property, Off- Property, and Reference	Fish TSAP	Alantic Richfield	US EPA	On-Property, Off-Property Area, and Reference Area FRI Work Plans - Task Sampling and Analysis Plan for Fish Investigations [Draft Final]	Submitted US EPA comments delivered 08/12/16	Before proceeding with specimen collection, Atlantic Richfield Company is requesting (in Appendix D, Section 4.0) that the U.S. EPA provide written confirmation that the work described in this TSAP is exempt from state federal permit requirements under CERCLA 121(e) and that no further consultation with the U.S. Fish and Wildlife Service is required under the Endangered Species Act.
05/13/16		05/13/16	On-Property, Off- Property, and Reference	Fish TSAP	US EPA	Atlantic Richfield	EPA comments on Draft On-Property, Off-Property, and Reference Area Focused Remedial Investigation Work Plans—Task Sampling and Analysis Plan for Fish Investigation, Leviathan Mine Site, Alpine County, California, dated February 5, 2016	Received	Requests line-by-line RTC and revised and updated SAP within 30 days.
02/05/16	02/05/16	01/29/16 per 11/13/15 11/13/16 extension 01/29/16 request, 02/05/16 per 1/27/16 email		Fish TSAP	Atlantic Richfield	US EPA	On-Property, Off-Property, and Reference Area FRI Work Plans - Task Sampling and Analysis Plan for Fish Surveys and Sampling [Draft]	Submitted US EPA comments delivered 05/13/16	11/13/16 letter to request extention to 01/29/ 01/27/16 email to inform need additional wee 02/05/16
12/08/15		12/08/15	On-Property, Off- Property, and Reference	Fish TSAP	Atlantic Richfield	US EPA	US EPA Response to Request for Schedule Extension for Fish Sampling Work Plan On-Property, Off-Property, and Reference Area Focused Remedial Investigation Work Plans	Received; esponded via email on 12/10/15	US EPA indicates not opposed as long as do not impact RI/FS schedule and its RI and Ri Assessment. Atlantic Richfield responsed viewail on 12/10/15 explaining rationale for time of field activities and submittal date for work Further discussed during 12/10/15 quarterly technical meeting.

11/13/15	11/13/15	On-Property, O Property, and Reference		Atlantic Richfield	US EPA	Request for Schedule Extension for Fish Sampling Work Plan On-Property, Off-Property, and Reference Area Focused Remedial Investigation Work Plans	Submitted	US EPA comments delivered 12/08/15	Requests extension to 1/29/16; need additiona time to review and evaluate previous investigation results.
10/13/15	10/13/15	Requested On-Property, Control on the strength of the strength		US EPA	Atlantic Richfield	Request for Fish Sampling Work Plan On-Property, Off- Property, and Reference Area Focused Remedial Investigation Work Plans	Received		Requested in US EPA's 10/13/15 letter transmitting comments on the Final BHHRA W Plan.
09/09/16	09/09/16	On-Property, O Property, and Reference		Atlantic Richfield	US EPA	Supplement Plant Data Collection	Submitted		Informed US EPA of additional plant data collection (mass and total/inorganic arsenic for three leafy greens) to be performed in late 201
04/08/16	04/08/16	04/09/16 On-Property, C Property, and Reference		Atlantic Richfield	US EPA	On-Property, Off-Property Area, and Reference Area FRI Work Plans – Plant and Habitat-Related Soil Investigations [Final]	Submitted	Pending US EPA review	Submitted with line-by-line response to 03/06/2 comments.
03/09/16	03/09/16	On-Property, O Property, and Reference		US EPA	Atlantic Richfield	EPA comments on the Progress Report and Response to Comments on the Draft Final On-Property, Off Property and Reference Area Focused Remedial Investigation (FRI) Work Plan – Plant and Habitat-Related Soil Investigations, Leviathan Mine Site, Alpine County, California; dated November 16, 2015	Received		Requests line-by-line RTC and revised and updated SAP by April 9, 2016. Directs works to proceed and be completed within 2016 field sampling season.
11/16/15	11/16/15	On-Property, C Property, and Reference		Atlantic Richfield	US EPA	Progress Report and Response to Comments on the Draft Final On-Property, Off Property and Reference Area Focused Remedial Investigation Work Plan – Plant and Habitat-Related Soil Investigations	Submitted		
10/16/15	10/16/15	RTC by 11/16/15 On-Property, C Property, and Reference		US EPA	Atlantic Richfield	EPA Comments on the June 19, 2015 Draft Final On- Property, Off-Property and Reference Area FRI Work Plan - Plant and Habitat-Related Soil Investigations	Received		RTC and associated revisions are accepted. Defers to the approved work plan and previous EPA comments and provides additional comment; makes several requests.
06/19/15	06/19/15	On-Property, O Property, and Reference		Atlantic Richfield	US EPA	Draft Final On-Property, Off-Property Area, and Reference Area FRI Work Plans – Plant and Habitat- Related Soil Investigations	Submitted		
06/02/15		On-Property, C Property, and Reference		Atlantic Richfield	US Forest Service	Notification of Plant Collection Activities Within the Humboldt-Toiyabe National Forest	Submitted		
05/18/15		US EPA requests written response within 30 days or by 6/19/15	Off- Plant/Soil TSAP	US EPA	Atlantic Richfield	EPA Comments on two separate submittals: the March 20, 2015 Technical Memorandum; Habitat Surveys, Plant Species, and Study Design for Plant Sampling, and the April 7, 2015 On Property FRI Work Plan and Off Property Area FRI Work Plan Plant and Habitat-Related Soil Investigations	Received		
04/07/15		On-Property & Property	Off-Plant/Soil TSAP	Atlantic Richfield	US EPA	On-Property FRI Work Plan and Off-Property Area FRI Work Plan - Plant and Habitat-Related Soil Investigations	Submitted		
02/08/16	02/08/16	On-Property	Optimization	US EPA	Atlantic Richfield	EPA comments on the Altantic Richfield Response to US EPA September 11, 2015 Comments on Optimization of Select On-Property Monitoring, dated October 12, 2015	Received		Concurrence
10/12/15	10/12/15	10/12/15 On-Property	Optimization	Atlantic Richfield	US EPA	Response to U.S. EPA September 11, 2015 Comments on Optimization of Select Monitoring Programs	Submitted		
09/11/15	09/11/15	RTC by 10/12/15 On-Property	Optimization	US EPA	Atlantic Richfield	EPA comments on the Atlantic Richfield Response to U.S. EPA Comments on Optimization of Select On-Property Monitoring, dated April 24, 2015	Received		
04/24/15		On-Property	Optimization	Atlantic Richfield	US EPA	Response to U.S. EPA Comments on Optimization of Select On-Property Monitoring Programs	Submitted		
03/26/15		On-Property	Optimization	US EPA	Atlantic Richfield	EPA comments on Proposed Optimization of Select On- Property Monitoring Programs, letter dated February 4, 2015	Received		
02/04/15		On-Property	Optimization	Atlantic Richfield	US EPA	Optimization of Select On-Property Monitoring Programs [in 2014]	Submitted		
06/17/14		On-Property	Optimization	Atlantic Richfield	US EPA	Technical Meeting: Optimization of Monitoring Programs and 2014 Field Priorities	Conducted		
10/13/15		On-Property	Drilling	Atlantic Richfield	US EPA	RE: EPA Comments to ARC request for US EPA to reconsider Letter of August 14, 2015 Requesting Continuation of RI/FS Drilling Program in 2015	Received		E-mail response to 10/06/15 letter; concurs that should proceed with both reference boreholes and complete LOC-34 as weather permits and drilling equipment is available.
10/06/15		On-Property	Drilling	Atlantic Richfield	US EPA	Response to US EPA Email Correspondence of September 28, 2015 Regarding Rationale for Proposed 2015 Modifications to RI/FS Drilling Program	Submitted		US EPA responded by e-mail on 10/13/15.
09/28/15		On-Property	Drilling	US EPA	Atlantic Richfield	EPA Comments to ARC Request for U.S. EPA to Reconsider Letter of August 14, 2015 Requesting Continuation of RI/FS Drilling Program in 2015	Received		E-mail

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09/18/15			On-Property	Drilling	Atlantic Richfield	US EPA	Response to US EPA Letter of August 14, 2015 Regarding Rationale for Proposed 2015 Modifications to RI/FS Drilling Program	Submitted		E-mail
09/08/15			On-Property	Drilling	US EPA	Atlantic Richfield	EPA response to Atlantic Richfield's 8/28/15 email responding to Response to US EPA comments on Rationale for Proposed 2015 Modifications to RI/FS Drilling Program	Received		E-mail
08/28/15		08/28/15	On-Property	Drilling	Atlantic Richfield	U.S. EPA	Response to US EPA comments on Rationale for Proposed 2015 Modifications to RI/FS Drilling Program	Submitted		E-mail
08/14/15			On-Property	Drilling	US EPA	Atlantic Richfield	EPA Comments on Rationale for Proposed Modifications to RI/FS Drilling Program	Received		
06/26/15			On-Property	Drilling	Atlantic Richfield	US EPA	Rationale for Proposed 2015 Modifications to RI/FS Drilling Program	Submitted		
06/12/15			On-Property	Drilling	US EPA	Atlantic Richfield	Leviathan Mine - Drilling Program - EPA comments and request for additional information (email)	Received		E-mail
06/09/15			On-Property	Drilling	Atlantic Richfield	US EPA	Leviathan Mine - Drilling Program (email)	Submitted		Transmits table and figure showing proposed drilling locations for 2015
12/18/14			On-Property	Drilling	Atlantic Richfield	US EPA	2014 Drilling Postponement Rationale	No pending action; A requested response June 17, 2014 discussion and December 18, 2014 fi	to Tony agreeing that Pit wells are not currently needed and requesting that ARC go forward with two wells along the	
08/01/13			On-Property	Drilling	Atlantic Richfield	US EPA	Technical Meeting: 2013 RI/FS Drilling Program	Conducted		
12/05/17		12/05/17 None	On-Property	Amendment 12	US EPA	Atlantic Richfield	Email FW: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA	Received; in progress	Please provide additional details (i.e. map relative to other hydrocarbon findings, and mining era site features) to support how ARC concluded that these observations do not merit follow-up / investigation.	
06/01/16	06/01/16	05/28/16	On-Property	Amendment 12	Atlantic Richfield	US EPA	On-Property FRI Work Plan Amendment No. 12 - TSAP for Hydrocarbon Investigation (Draft Final)	Submitted Pending US EPA rev	ew	Submitted with line-by-line response to 04/29/comments
04/29/16		04/29/16	On-Property	Amendment 12	US EPA	Atlantic Richfield	EPA Comments on Atlantic Richfield Draft On-Property Focused Remedial Investigation Work Plan Amendment No. 12 – Task Sampling and Analysis Plan for Hydrocarbon Investigation, Leviathan Mine Site, Alpine County, California, dated February 26, 2016	Received		Requests line-by-line RTC and revised SAP by 05/28/16. Directs works to proceed and be completed within 2016 field sampling season.
02/26/16	02/26/16	01/30/16	On-Property	Amendment 12	Atlantic Richfield	US EPA	On-Property FRI Work Plan Amendment No. 12 - TSAP for Hydrocarbon Investigation	Submitted		Atlantic Richfield agreed to prepare work plan during a 10/14/14 telephone call.
06/14/16		06/14/16	On-Property	Amendment 11	US EPA	Atlantic Richfield	Email FW: EPA Approval Amendment No. 11 Acid Ponding Near Leviathan Creek TSAP	Received; need to provide DPZ information		Requests information on the four drive-point piezometers that US EPA requested to be installed along the west bank of Leviathan Cre No due date provided.
05/06/16	05/06/16	Not requested	On-Property	Amendment 11	Atlantic Richfield	US EPA	On-Property FRI Work Plan Amendment No. 11 - TSAP for Surface Water/Groundwater Interaction Investigation near Acidic Pond and Leviathan Creek [Final]	Submitted		No revision requested; however, submitted as final to include additional requested drive-poir piezometer pairs and make correction regardinstallation of data loggers/transducers.
02/26/16		02/26/16	On-Property	Amendment 11	US EPA	Atlantic Richfield	Draft Final Amendment No. 11 - TSAP for Investigation of Ponding Near Leviathan Creek, Leviathan Mine Site, Alpine, County, California, dated February 22, 2015 [sic]	Received		Approves Atlantic Richfield to procede with th work as outlined and directs installation of dri point piezometers pairs at four more locations
02/22/16	02/22/16		On-Property	Amendment 11	Atlantic Richfield	US EPA	On-Property FRI Work Plan Amendment No. 11 - TSAP for Surface Water/Groundwater Interaction Investigation near Acidic Pond and Leviathan Creek [Draft Final]	Submitted		Submitted with line-by-line RTC to 01/22/16 comments.
01/22/16		01/22/16	On-Property	Amendment 11	US EPA	Atlantic Richfield	EPA Comments on Amendment No. 11 - TSAP for Investigation of Ponding Near Leviathan Creek, Leviathan Mine Site, Alpine County, California, dated September 20, 2015	Received		US EPA requests line-by-line response to comments and revised TSAP by 02/19/16.
09/20/15	09/20/15		On-Property	Amendment 11	Atlantic Richfield	US EPA	On-Property FRI Work Plan Amendment No. 11 - TSAP for Investigation of Ponding Near Levaithan Creek	Submitted Comments delivere 01/22/16	1	
05/18/16		05/18/16	On-Property	Amendment 10	US EPA	Atlantic Richfield	EPA Approval of Atlantic Richfield's [sio] Company's On- Property FRI Work Plan Amendment No. 10, Revision 3 Final, dated September 30, 2015	Received		Approves the Revision 3 workplan with addition comments; Atlantic Richfield to provide an updated schedule and any final workplan modifications for the 2016 field season based preliminary evaluation of stream sediment and floodplain soil sampling results. Indicates comments on the 04/15/16 submission will be provided under separate cover.

12/21/15	12/21/15	On-Property	Amendment 10	US EPA	Atlantic Richfield & Others	2015/2016 El Niño Contingency Plan [Final]	Received		
12/02/15	12/02/15	On-Property	Amendment 10	Atlantic Richfield	US EPA	Suggested edits to Final Draft El Niño Contingency Plan	Submitted		Discussed during 12/10/15 quarterly technical meeting; Greg Reller and Bob Starr discussed criteria for changes in water quality after the meeting.
11/30/15	11/30/15	On-Property	Amendment 10	US EPA	Atlantic Richfield & Others	El Niño Contingency Plan [Final Draft]	Received		
11/23/15	11/23/15	On-Property	Amendment 10	Atlantic Richfield	US EPA	Response to US EPA comments on EI Niño Contingency Plan provided by email on 11/23/15	Submitted	Comments delivered via email on 11/30/15	
11/17/15	11/17/15	On-Property	Amendment 10	Atlantic Richfield	US EPA	Comments on U.S. EPA's El Niño Contingency Plan	Submitted	Responded via email on 11/23/15	
10/20/15		On-Property	Amendment 10	US EPA	Atlantic Richfield	EPA Comments on Field Memorandum for Phase 2 Characterization of Beaver Dam Mud, On-Property Reach of Leviathan Creek, Dated October 13, 2015	Received		Approved, directs ARC to ensure sampling completed during 2015 season.
10/19/15		On-Property	Amendment 10	Atlantic Richfield	US EPA	Winter Monitoring Plan for Beaver Dam/Pond Complex in the On-Property Reach of Leviathan Creek	Submitted		
10/13/15		On-Property	Amendment 10	Atlantic Richfield	US EPA	Field Memorandum for Phase 2 Characterization of Beaver Dam Mud, On-Property Reach of Leviathan Creek	Submitted		